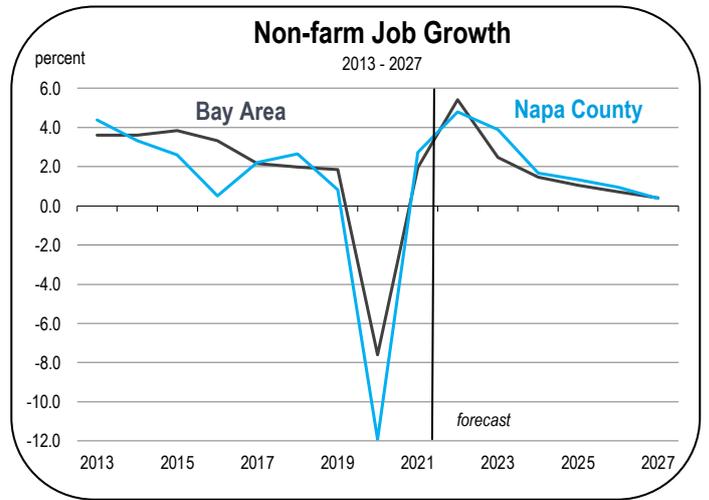


Napa County Economic Forecast

Forecast Summary

- Following a crushing 9,000 job reduction in 2020 as a result of the pandemic, 1,800 jobs were restored in 2021. Approximately 3,300 jobs will be further restored in Napa County in 2022.
- A full labor market recovery from the 2020 recession is expected until 2024.
- Employment gains in 2022 will be largest in leisure services, manufacturing, and personal services.
- The wine industry rebounded in 2021. Wine grape production increased 21 percent and average grape values rose sharply. The 2022 harvest was lower in volume, but appears qualitatively superior to 2021 and prices for grapes and juice are expected to increase further.
- The Napa County unemployment rate averaged 6.1 percent in 2021. It is forecast to average 3.0 percent in 2022.
- The county's population is expected to decline over the forecast period.
- Fewer homes will be built between 2022 and 2027 than were entitled during the previous five years where many of those permitted homes were fire rebuilds.
- Though home prices rose sharply in 2021 by 9.1 percent, prices surged more rapidly during the first half of 2022 and are expected to result in an average annual increase of 10 percent for the year, despite declining selling values that have prevailed after August 2022.
- Homes in Napa County are more affordable than other parts of the Bay Area, but because new home production has been scarce, increasing unaffordability of housing will characterize the Napa County housing market over the forecast.

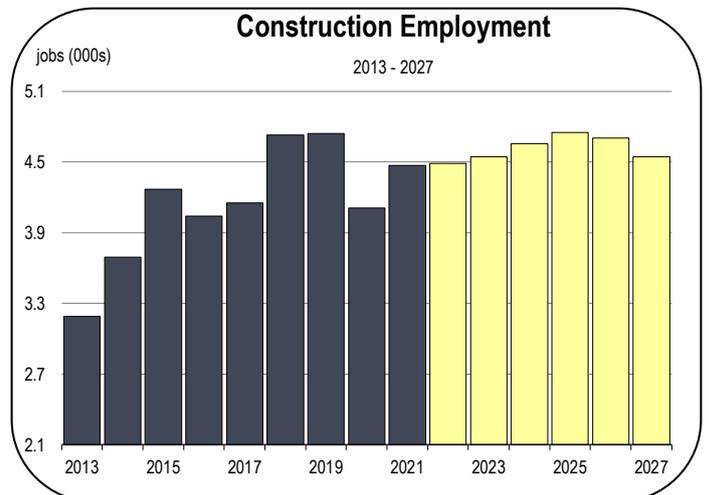
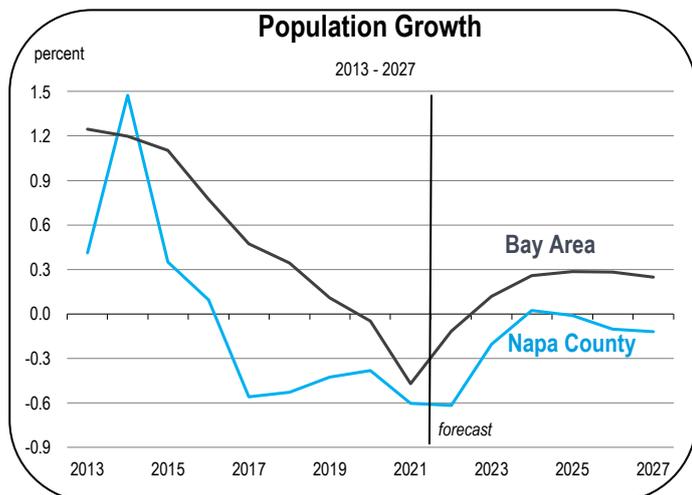


Job Growth

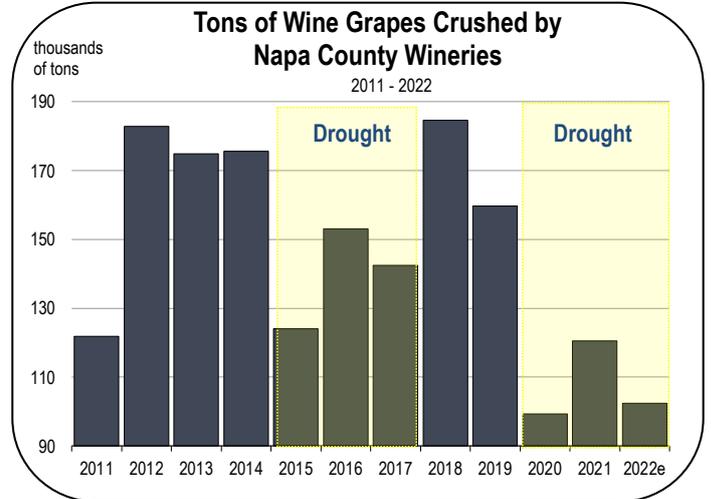
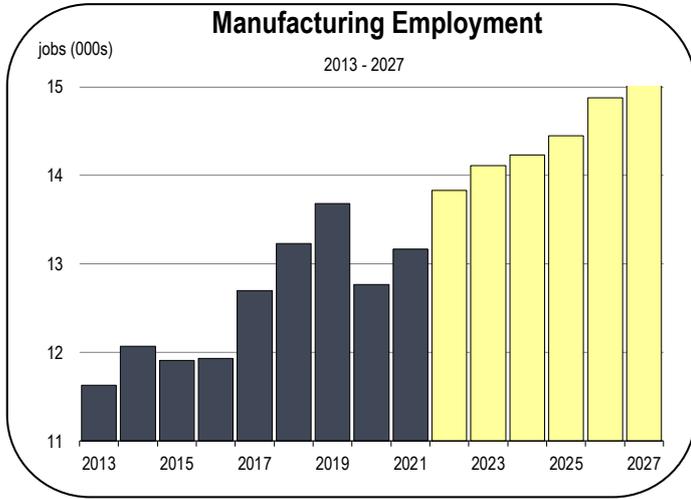
- Total employment in Napa County will expand by 4.4 percent in 2022, and 3.6 percent in 2023.
- Between 2022 and 2027, employment growth will average 2.0 percent per year, a rate similar to the employment growth forecast for the broader Bay Area labor market.

Construction Employment

- Employment in construction increased slightly during 2022, largely because of the difficulty in hiring skilled employment throughout the Bay Area.
- Some expansion in jobs is forecast for 2023 but the construction sector will remain largely stable because (1) the fire rebuilds are mostly complete, and (2) new housing production will be limited over the next 3 years.
- The extent of new non-residential building or renovations that is forecast will not require an expansion in the construction workforce.



Napa County Economic Forecast



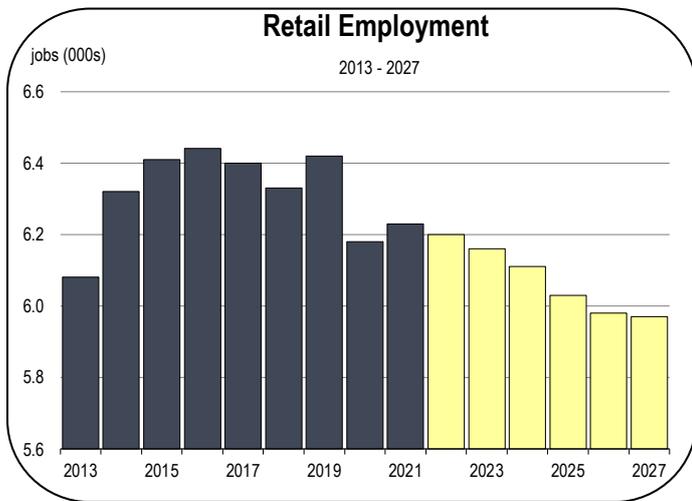
Manufacturing Employment

- Wineries produced 120,500 tons of wine grapes in 2021. Production was up 21 percent, or 21,200 tons from 2020. However, despite this huge increase, production is still 21 percent lower than the 10-year average of 151,700 tons of wine grapes.
- The total value of the 2021 wine grape crop was \$742 million, representing a 61 percent increase over the 2020 wine grape crop value. This sharp increase can be attributed to the rise in the price of red wine grapes and the recovery from 2020 Glass Fire.
- The average price paid per ton for all wine grapes was \$6,154, a new record high.

- The harvest in 2021 is yielding a high-quality vintage. The 2022 vintage had lower yields than predicted, however, the lower yields produced a wine grape reported to have more intense flavor. This is attributed to both the drought and the weather conditions that prevailed during the August to October harvest season of 2022.
- The Wine Industry Network Advisor reported that: "Winemakers describe 2022 white wines as having perfect acidity and freshness with remarkable flavors and textures, and red wines as excellent structured with deep red colors, luxurious tannins and exquisite fruit-forward aromatics."

	Weighted Average Prices Paid for Wine Grapes	
	2021	percent change from 2020
	dollar per ton	
Cabernet Sauvignon	\$8,082	29.1
Pinot Noir	\$2,637	-0.4
Merlot	\$4,032	25.3
Zinfandel	\$4,435	10.7
Syrah	\$4,251	15.3
Chardonnay	\$3,245	7.2
Sauvignon Blanc	\$2,635	7.4

Napa County Economic Forecast



Retail Trade Employment

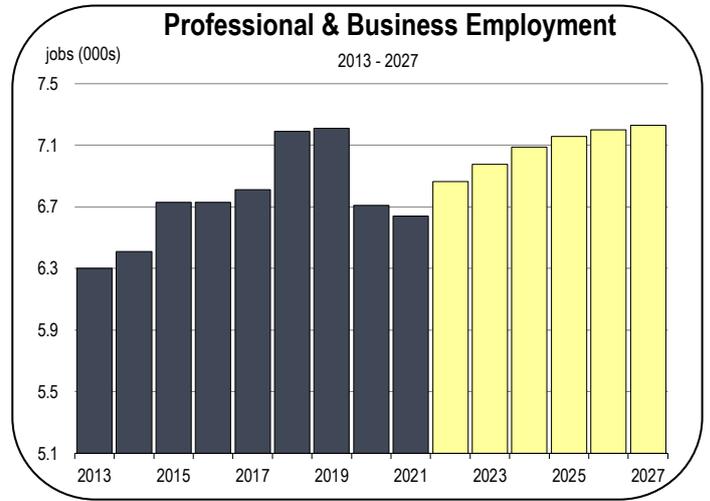
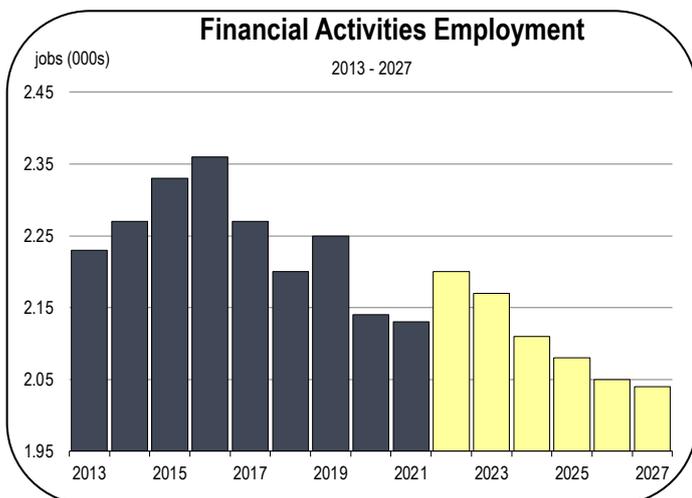
- Total retail trade employment increased 1 percent in 2021 but will decline 0.4 percent in 2022.
- Employment in retail will decline marginally over the forecast due to automation in retail stores and the accelerating transition to online shopping.

Financial Activities Employment

- The financial activities industry is largely comprised of real estate firms, banks, and insurance firms.
- There was an uptick in the formation of financial sector jobs during 2022, as part of job restoration from the 2020 pandemic recession. Over time however, the trajectory of employment is expected to resume the consolidating trend in place since 2017.

Professional and Business Services Employment

- The professional and business services industry includes a diverse

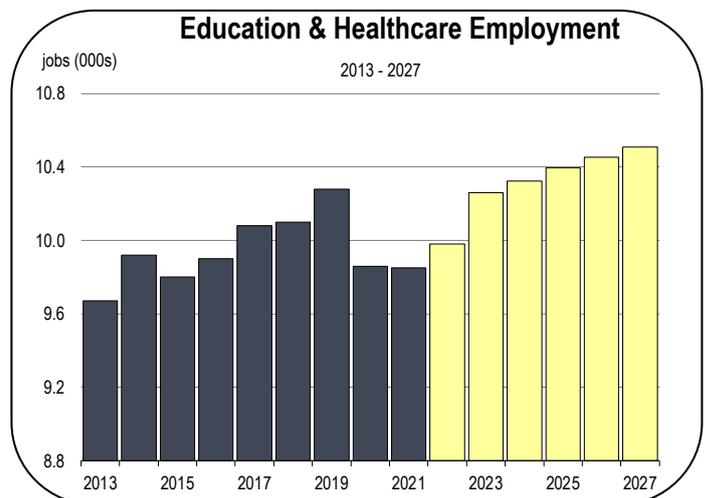


array of subsectors including professional, technical, and scientific consulting, managerial services, administrative services, and building maintenance.

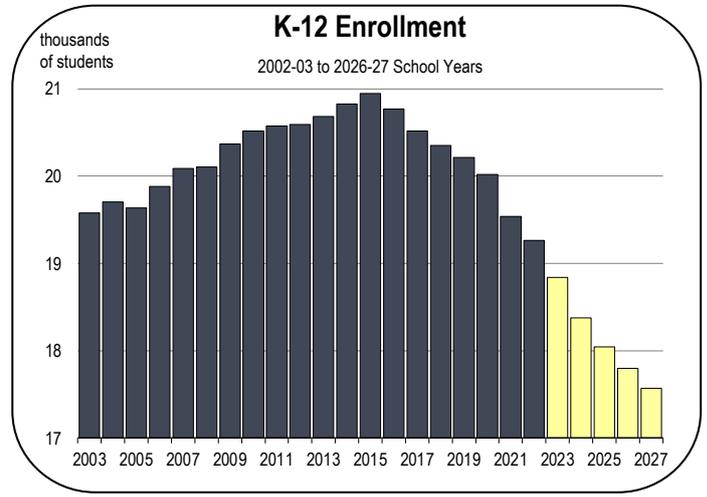
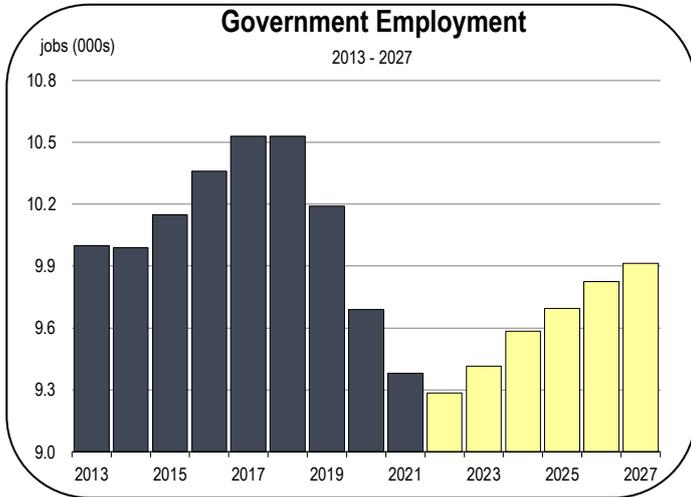
- Employment in the broad sector will increase 2.1 percent in 2022, accounting for 140 jobs.
- This composite industry will represent much of the growth in employment opportunities in the future, not only in Napa County but in the entire state.
- Over the long term, growth is expected to be strongest in engineering and technology consulting.

Private Education and Healthcare Employment

- Healthcare employment will rise 1.4 percent in 2022, adding 130 jobs to the Napa County labor market.
- The outlook for through 2024 calls for the industry to gain traction in filling open positions that have remained unfilled due to labor force availability. Job growth will rise an average of 1.7 percent per year in 2023 and 2024.



Napa County Economic Forecast

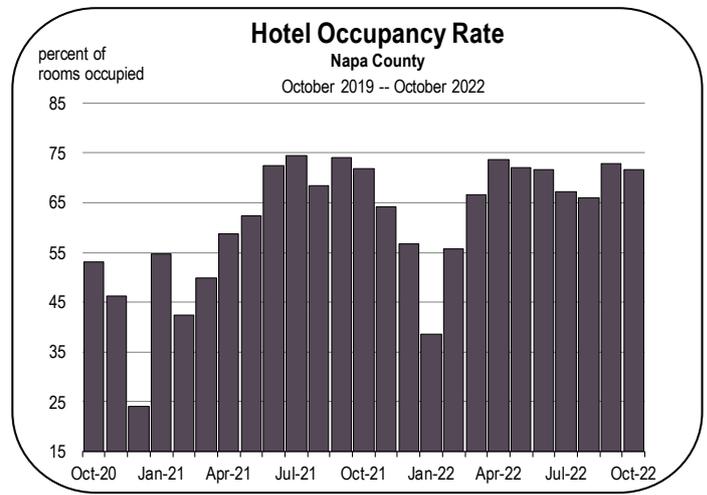
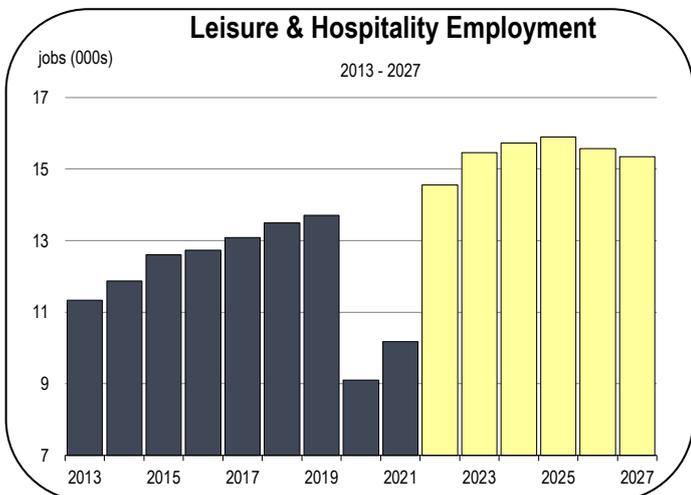


Government Employment

- Recovery in public sector employment has been absent in Napa County since 2019.
- Employment is expected to marginally rise over the forecast, but pre-pandemic levels are not expected.
- The sharp decline in K-12 school enrollment since 2016 has reduced the need to staff public schools and administration. This decline is forecast for the rest of the decade.

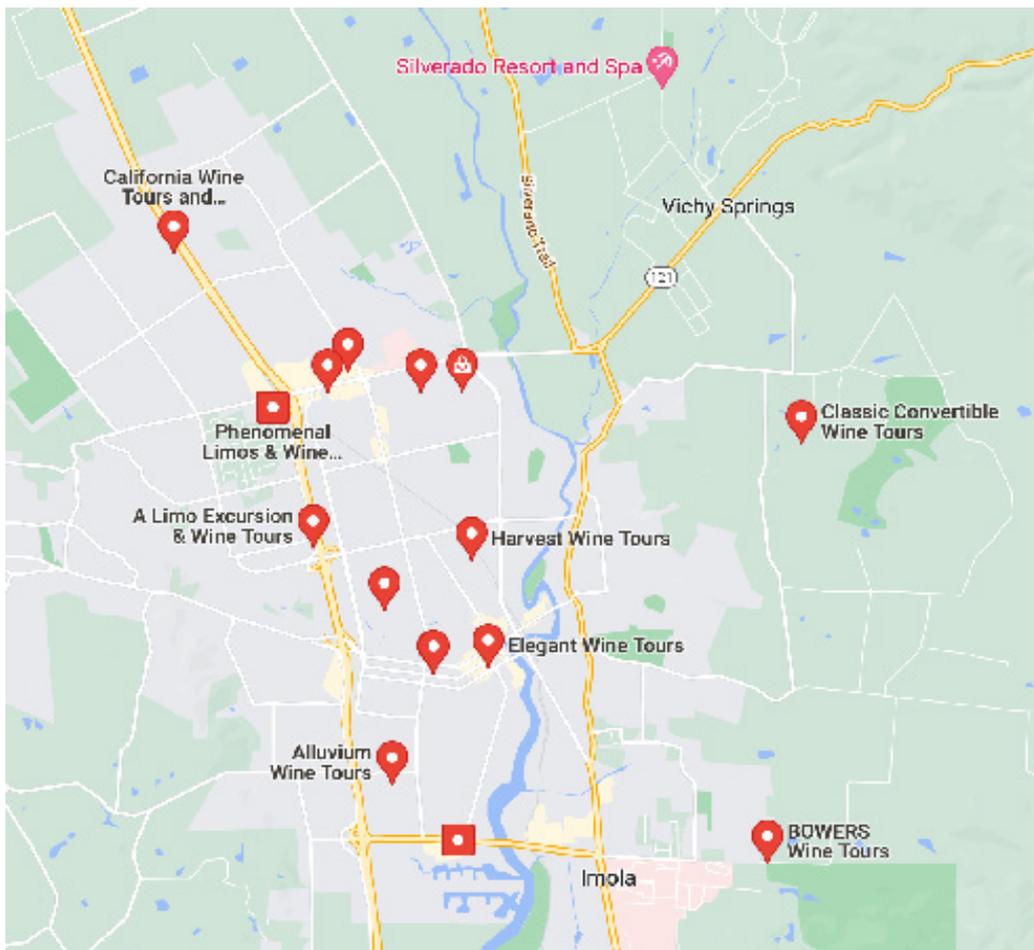
Leisure and Hospitality Employment

- Employment in the industry rebounded sharply in 2021 and 2022. Just over 1,000 jobs were added in 2021, and the pace of job creation in 2022 will account for 2,200 restored jobs, a 22 percent increase.
- Tourism is a large contributor to the Napa County economy, and tourism has bounced back sharply in 2021 and 2022.
- In the spring and summer months, approximately 80 percent of hotel rooms are occupied on any given day, with close to 100 percent of transient rooms occupied on weekends.



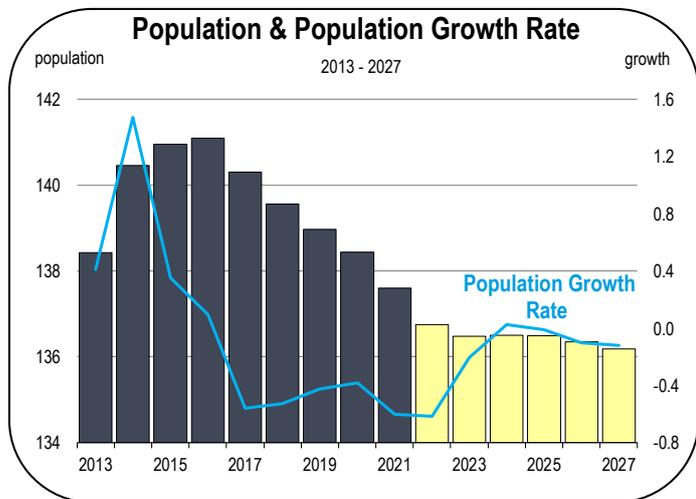
Napa County Economic Forecast

- In 2022, the hotel occupancy rate is averaging 66 percent for the year, and over 70 percent during the summer months.
- The surge in travel throughout California that began in 2021 has extended into 2022. This surge is benefitting the dining, drinking, and recreation sectors of Napa County.
- The forecast has leisure/hospitality rising by another 1,700 jobs in 2023 and 700 jobs in 2024.
- Wine sales and wine tourism appear to be principal beneficiaries, evidenced by the rebound in visitor industry employment throughout the wine region in the North Bay.
- Surveys conducted by Visit Napa Valley report that 81 percent of all visitors come principally for wine tasting. Forty-five percent of all visitors use organized wine tours as a means to visit the county's wine region.
- On average, an estimated 19,000 day visitors travel to Napa Valley each day of the year.



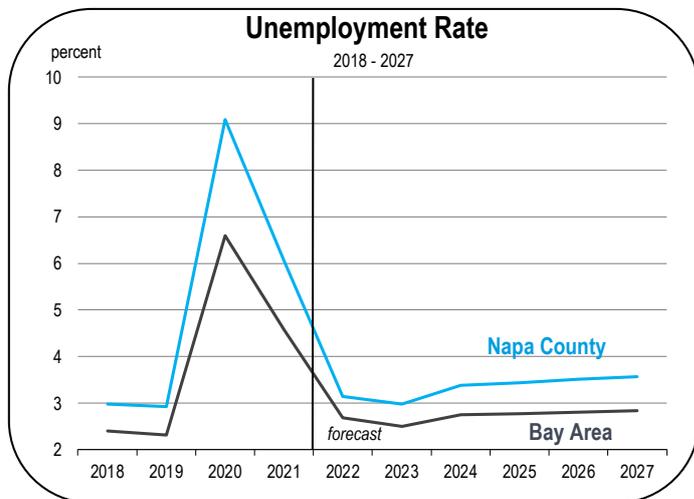
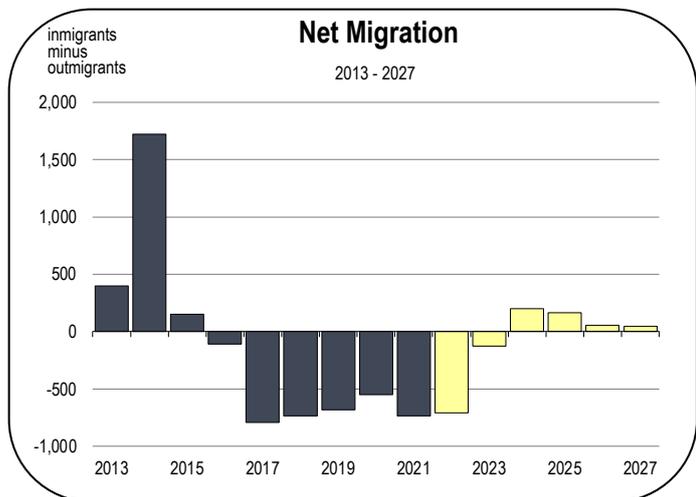
Each red marker is a wine country touring company.

Napa County Economic Forecast



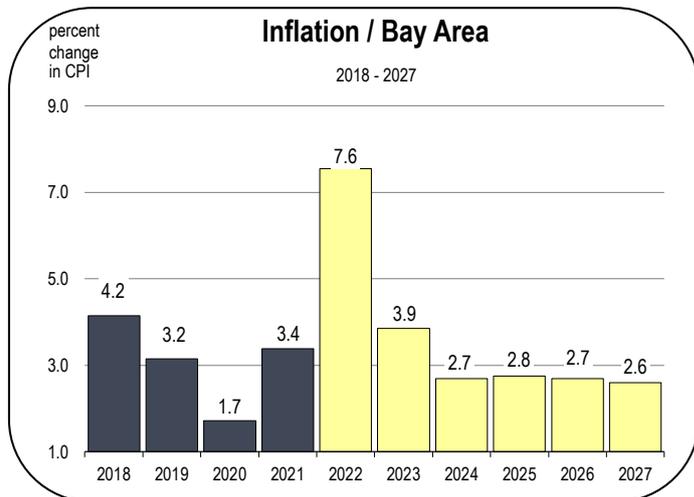
Population Growth

- Net out-migration from Napa County has ranged from 500 to 800 residents per year since 2017.
- Net migration is not expected to reverse course until 2024 or beyond, but the volume of people coming into Napa County will remain muted, due to (1) housing cost, (2) housing availability, and (3) limited job opportunity.
- While net in-migration is not contributing to population growth, the aging population of Napa County is gradually reducing the birth rate, and annual deaths have begun to outnumber annual births.
- Over the next 5 years, the population declines to 136,200 residents, a decline of 1,500 persons from 2021.
- By 2027, the population will have declined to 136,000 residents, a loss of 1,500 residents from 2021 levels.

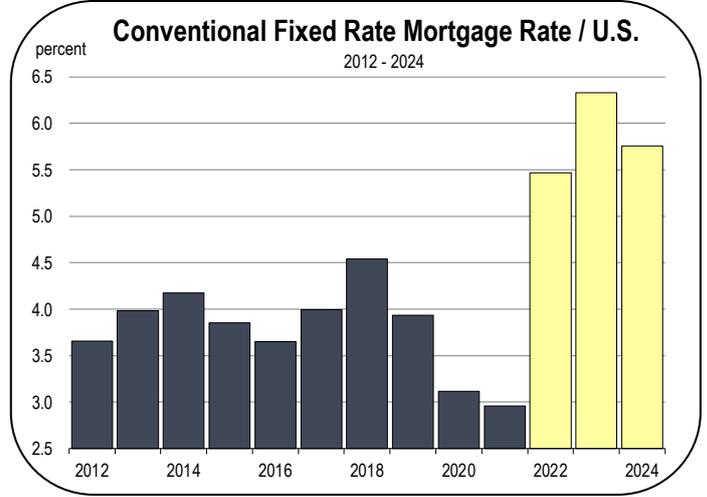
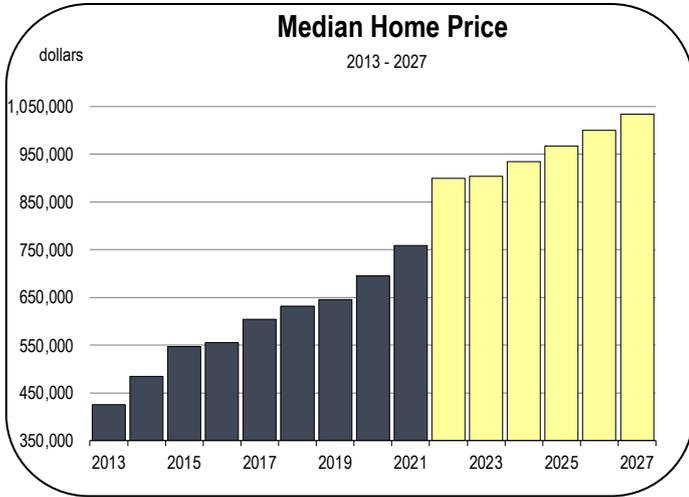


Unemployment and Inflation Rates

- The unemployment rate in Napa County averaged 6.1 percent in 2021, which is above the composite rate for the Bay Area.
- An unemployment rate below 4.0 percent signifies a fully employed workforce. The unemployment rate is expected to average 3.7 percent during the forecast period.
- Inflation soared in 2021 and is expected to remain elevated for several years.
- During 2022 and into 2023, there will be a number of factors that will contribute to higher inflation. The most prominent will be:
 - Record spending by consumers and the federal government during 2021 and 2022
 - Fractures in the global supply chain that raise the cost of production for many businesses
 - Sharp increases in the cost of housing and energy
 - Labor market recruitment challenges that force companies to raise wages



Napa County Economic Forecast



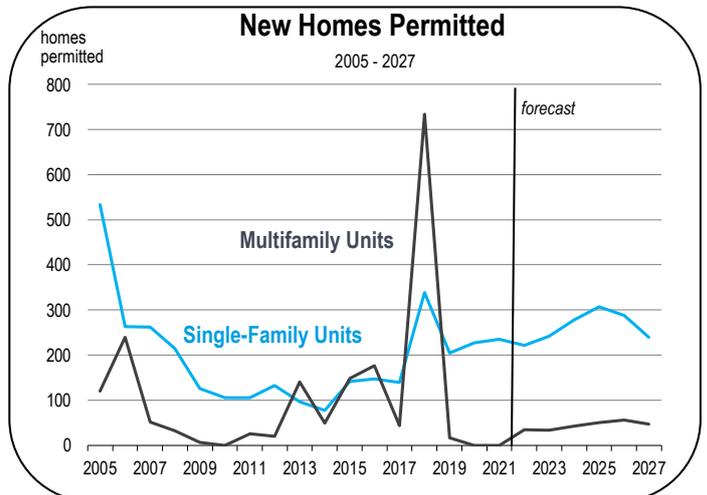
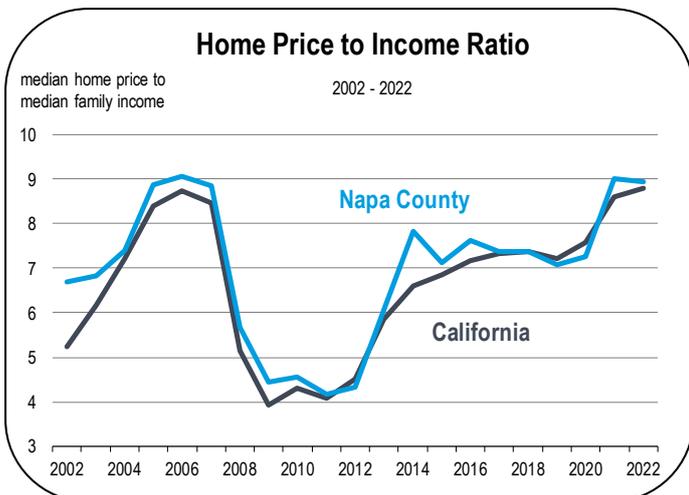
- Combined, these factors have pushed inflation to its highest rate in 40 years. Ultimately, inflation reduces the purchasing power of households and negatively impacts consumer confidence, limiting the growth potential of the economy in 2022.
- However, inflation will gradually decelerate in 2023 as supply chains are restored, and the impending economic slowdown moderates the demand for labor and wage increases. Average inflation rates eventually decline to 3 percent again by 2024.

- Homes in Napa County are more affordable than other parts of the Bay Area. In 2021, the typical family would have needed to spend 30 percent of its income to afford the median priced home. In 2022, the median household income rose sharply, enabling the typical family to afford Napa County housing at approximately 35 percent of income.
- From 2016 to 2021, an average of 377 new homes were permitted each year in Napa County. Approximately 60 percent were single-family homes.

Home Prices and New Housing Production

- In 2021 the median home value for all homes sold in Napa County was \$758,500. For single family detached homes, the median selling value was \$911,600.
- During 2022, the value of housing has continued to soar, despite higher mortgage rates. Selling values for 2022 are now averaging over \$1 million and will record an appreciation rate of 11 percent for the year.

- Housing production is expected to average 310 homes per year from 2022 to 2027, dominated by single-family home development.
- Because housing construction is and will remain limited, affordability of housing will remain an escalating issue in Napa County, just as it has in other parts of the Bay Area.
- The volume of housing forecast over the next five years will probably be insufficient to prevent home prices from rising indefinitely.



Napa County Economic Forecast

- Interest rates rose throughout 2022 and will moderate in 2023 as inflation decelerates. Home prices are not expected to increase in 2023 but will rise over the forecast in tandem with limited growth of supply and rising Bay Area incomes.
- The Association of Bay Area Governments (ABAG) assigned Napa County a total of 3,844 housing units to build over the 2023-2031 period. This assignment comes from the Regional Housing Needs Assessment program of the Housing and Community Development Department.
- Nearly a third of this housing allocation, 1,138 units, are required to be very low-income housing (which means affordable for families with 50% of the County's median income).
- Napa County has 3 housing development projects in its pipeline all in the City of Napa:
 1. Heritage House – 66 units
 2. Valle Verde – 24 units
 3. Napa Pipe - 140 units
- Napa Pipe is the biggest development project in Napa County, spanning over a 154-acre property along the Napa River located at 1025 Kaiser Road.
- At complete buildout, Napa Pipe is planned to include:
 - 945 residential units
 - A Big Box retail center
 - 50 units of senior housing
 - 150-room hotel
 - 90,000 square feet for retail space
 - 90,000 square feet of office, commercial, and light industrial space
 - 1.5 million square feet for parks and open space
- It was announced in 2022 that a Costco will open in 2023 as part of Phase 1. There are a total of 4 phases comprising the Napa Pipe development.



Napa Pipe Future Vision

Napa County Economic Forecast

Economic Indicators

2015-2021 History, 2022-2050 Forecast

	Population (people)	House- holds (thousands)	Net Migration (people)	New Homes Permitted (homes)	Registered Vehicles (thousands)	Personal Income (billions)	Taxable Retail Sales (billions)	Total Taxable Sales (billions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	Unemployment Rate (percent)	Real Farm Production (millions)	Inflation Rate (percent)
140,955	49.2	149	289	146	\$9.1	\$1.9	\$3.3	\$3.3	\$77,661	4.7	\$665	1.4	
141,089	49.3	-107	323	149	\$9.6	\$1.9	\$3.4	\$3.3	\$79,654	4.3	\$860	2.3	
140,299	49.4	-791	183	148	\$9.9	\$2.0	\$3.5	\$3.3	\$79,576	3.7	\$855	3.0	
139,558	49.0	-735	1,073	148	\$10.0	\$2.2	\$3.7	\$3.0	\$77,714	3.0	\$1,132	3.7	
138,965	49.0	-684	222	151	\$10.4	\$2.2	\$3.8	\$3.0	\$78,919	2.9	\$986	2.9	
138,433	49.1	-548	227	147	\$9.2	\$1.9	\$3.2	\$2.7	\$68,738	9.1	\$477	1.8	
137,600	48.7	-737	235	148	\$11.3	\$2.4	\$4.1	\$3.3	\$82,059	6.1	\$746	4.2	
136,753	49.0	-709	256	149	\$12.2	\$2.8	\$4.8	\$3.3	\$82,815	3.1	\$923	7.3	
136,472	49.3	-128	276	150	\$12.9	\$2.8	\$5.0	\$3.3	\$84,645	3.0	\$932	3.5	
136,507	49.5	200	321	152	\$13.5	\$2.8	\$5.1	\$3.4	\$86,395	3.4	\$939	2.3	
136,491	49.9	163	358	153	\$14.1	\$2.9	\$5.1	\$3.4	\$87,457	3.4	\$931	2.3	
136,353	50.2	55	343	153	\$14.6	\$2.9	\$5.2	\$3.6	\$88,363	3.5	\$922	2.3	
136,187	50.6	45	287	154	\$15.2	\$3.0	\$5.2	\$3.6	\$89,702	3.6	\$934	2.2	
136,023	50.9	68	254	154	\$15.8	\$3.0	\$5.3	\$3.7	\$91,092	3.6	\$940	2.2	
135,908	51.1	125	240	155	\$16.4	\$3.1	\$5.5	\$3.8	\$92,149	3.6	\$944	2.3	
135,786	51.4	131	220	155	\$17.0	\$3.2	\$5.6	\$3.9	\$93,268	3.6	\$956	2.2	
135,705	51.6	187	227	155	\$17.7	\$3.3	\$5.8	\$4.0	\$94,437	3.6	\$962	2.1	
135,618	51.8	194	216	156	\$18.3	\$3.4	\$6.0	\$4.0	\$95,287	3.6	\$975	2.3	
135,472	52.0	148	204	156	\$19.0	\$3.5	\$6.1	\$4.1	\$96,589	3.6	\$991	1.9	
135,322	52.2	153	197	156	\$19.6	\$3.6	\$6.3	\$4.2	\$97,722	3.6	\$1,003	2.1	
135,165	52.4	158	192	156	\$20.4	\$3.7	\$6.5	\$4.2	\$98,803	3.6	\$994	2.2	
134,969	52.6	141	188	157	\$21.1	\$3.8	\$6.7	\$4.3	\$99,457	3.6	\$1,000	2.6	
134,746	52.8	133	183	157	\$21.8	\$4.0	\$7.0	\$4.3	\$100,057	3.6	\$1,006	2.7	
134,494	53.0	130	177	157	\$22.6	\$4.1	\$7.2	\$4.4	\$100,878	3.6	\$1,016	2.5	
134,228	53.2	128	172	157	\$23.4	\$4.2	\$7.5	\$4.4	\$101,502	3.6	\$1,025	2.7	
133,946	53.3	126	167	158	\$24.2	\$4.3	\$7.7	\$4.5	\$102,166	3.6	\$1,031	2.6	
133,652	53.5	128	163	158	\$25.0	\$4.5	\$7.9	\$4.5	\$103,170	3.6	\$1,038	2.2	
133,328	53.7	111	159	158	\$25.9	\$4.6	\$8.1	\$4.6	\$104,224	3.6	\$1,035	2.1	
132,994	53.8	119	154	158	\$26.7	\$4.7	\$8.3	\$4.7	\$105,305	3.6	\$1,038	2.0	
132,659	54.0	126	150	159	\$27.6	\$4.8	\$8.5	\$4.7	\$106,537	3.6	\$1,044	1.8	
132,318	54.1	134	147	159	\$28.4	\$4.9	\$8.8	\$4.8	\$107,622	3.6	\$1,047	1.9	
131,984	54.3	143	143	159	\$29.3	\$5.1	\$9.0	\$4.9	\$108,528	3.6	\$1,050	2.0	
131,663	54.4	152	141	159	\$30.2	\$5.2	\$9.2	\$4.9	\$109,158	3.6	\$1,057	2.2	
131,353	54.6	161	139	159	\$31.1	\$5.4	\$9.5	\$5.0	\$109,671	3.6	\$1,066	2.3	
131,048	54.7	168	137	160	\$32.0	\$5.5	\$9.8	\$5.0	\$110,481	3.6	\$1,069	2.0	
130,753	54.8	175	134	160	\$32.9	\$5.7	\$10.1	\$5.1	\$111,148	3.6	\$1,072	2.1	

Employment Sectors

2015-2021 History, 2022-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade	Financial Activities	Professional Services	Information	Health & Education	Leisure	Government
	(thousands of jobs)											
2015	75.3	5.0	4.3	11.9	2.0	8.1	2.3	6.7	0.4	9.8	12.6	10.2
2016	75.7	5.0	4.0	11.9	2.0	8.1	2.4	6.7	0.4	9.9	12.7	10.4
2017	77.3	5.0	4.2	12.7	2.0	8.1	2.3	6.8	0.4	10.1	13.1	10.5
2018	79.3	5.1	4.7	13.2	2.1	8.1	2.2	7.2	0.4	10.1	13.5	10.5
2019	79.9	5.2	4.7	13.7	2.1	8.2	2.3	7.2	0.3	10.3	13.7	10.2
2020	70.8	5.0	4.1	12.8	1.8	7.7	2.1	6.7	0.2	9.9	9.1	9.7
2021	73.0	5.3	4.5	13.2	2.0	7.7	2.1	6.6	0.3	9.9	10.2	9.4
2022	76.2	5.3	4.5	13.8	2.0	7.7	2.2	6.8	0.3	10.0	12.4	9.3
2023	78.9	5.3	4.5	14.1	2.1	7.7	2.2	7.0	0.3	10.3	14.1	9.4
2024	80.2	5.3	4.7	14.2	2.1	7.6	2.1	7.1	0.3	10.3	14.8	9.6
2025	81.2	5.3	4.7	14.5	2.2	7.6	2.1	7.2	0.3	10.4	15.2	9.7
2026	81.9	5.3	4.7	14.9	2.2	7.5	2.1	7.2	0.3	10.5	15.3	9.8
2027	82.2	5.3	4.5	15.0	2.2	7.5	2.0	7.2	0.3	10.5	15.4	9.9
2028	82.5	5.3	4.4	15.2	2.3	7.5	2.0	7.3	0.3	10.6	15.5	10.0
2029	82.7	5.3	4.4	15.2	2.3	7.4	2.0	7.3	0.3	10.6	15.6	10.0
2030	82.9	5.3	4.3	15.3	2.3	7.4	1.9	7.3	0.3	10.7	15.6	10.1
2031	83.3	5.4	4.3	15.5	2.4	7.4	1.9	7.3	0.3	10.8	15.9	10.1
2032	83.7	5.4	4.3	15.6	2.4	7.4	1.8	7.4	0.3	10.8	16.0	10.1
2033	83.9	5.4	4.2	15.6	2.4	7.3	1.8	7.4	0.3	10.9	16.2	10.1
2034	84.2	5.4	4.2	15.7	2.4	7.3	1.8	7.4	0.3	11.0	16.3	10.1
2035	84.5	5.5	4.2	15.8	2.4	7.3	1.7	7.4	0.3	11.1	16.4	10.2
2036	84.8	5.5	4.1	15.9	2.5	7.2	1.7	7.4	0.3	11.2	16.6	10.2
2037	85.0	5.5	4.1	15.9	2.5	7.2	1.7	7.5	0.3	11.3	16.7	10.2
2038	85.3	5.5	4.1	16.0	2.5	7.1	1.6	7.5	0.3	11.3	16.8	10.2
2039	85.6	5.5	4.1	16.1	2.5	7.1	1.6	7.5	0.3	11.4	17.0	10.2
2040	85.9	5.5	4.0	16.2	2.5	7.0	1.6	7.5	0.3	11.5	17.1	10.2
2041	86.1	5.5	4.0	16.3	2.5	7.0	1.5	7.5	0.3	11.6	17.2	10.3
2042	86.4	5.5	4.0	16.3	2.5	7.0	1.5	7.5	0.3	11.7	17.4	10.3
2043	86.6	5.5	4.0	16.4	2.6	6.9	1.4	7.6	0.3	11.7	17.5	10.3
2044	86.9	5.5	4.0	16.5	2.6	6.9	1.4	7.6	0.3	11.8	17.6	10.3
2045	87.1	5.6	3.9	16.6	2.6	6.8	1.3	7.6	0.3	11.9	17.7	10.3
2046	87.3	5.6	3.9	16.7	2.6	6.8	1.3	7.6	0.3	11.9	17.9	10.3
2047	87.5	5.6	3.9	16.7	2.6	6.7	1.3	7.6	0.3	12.0	18.0	10.4
2048	87.7	5.6	3.9	16.8	2.6	6.7	1.2	7.6	0.3	12.0	18.1	10.4
2049	87.9	5.6	3.9	16.9	2.6	6.7	1.2	7.6	0.3	12.1	18.3	10.4
2050	88.2	5.6	3.9	17.0	2.7	6.6	1.1	7.6	0.3	12.1	18.4	10.4

Napa County Economic Forecast

Socioeconomic Indicators

